

SNOW STOP

The present invention concerns a snow stop, useful for impeding a sudden avalanche of snow on a pitched roof.

In general, the invention provides a snow stop comprising a base member, and a snow restraining member. In one particular embodiment, the snow stop has a series of holes for ventilation of adhesive as well as, as a further option, for insertion of fasteners such as nails, screws and/or staples, to fasten the device to a roof. In another particular embodiment, the base is round and the snow restraining member is included in intersecting upstanding members, which, say, may be at a predetermined angle to each other, for example, at about ninety degrees. Other embodiments of the snow stop of the invention are extant.

Significantly, the snow stop of the invention can engender better solvent evaporation from the adhesive under the base of the snow stop, with which the snow stop can be attached to the roof. Firmer attachment of the snow stop, and a more reliable performance and longer life, can thus be provided. In addition, the embodiment with the round base, particularly with generally symmetrical, upstanding members at right angles to one another, can be installed readily, and occasional misplacement on the roof is less noticeable. Further advantages attend the invention.

The appended drawings form part of the present specification. With respect to the drawings, the following is briefly noted:

FIG. 1 is a top view of a snow stop of the present invention,

which is made of a light-transmissive material, for example, of a polycarbonate plastic monolithically molded to form the device, its base having holes and a slotted, rough surfaced bottom.

FIG. 2 is a bottom view of the snow stop of FIG. 1.

FIG. 3 is a front view of the snow stop of FIGS. 1 & 2.

FIG. 4 is a left side view of the snow stop of FIGS. 1-3, its right side being in essence a mirror image thereof.

FIG. 5 is a rear view of the snow stop of FIGS. 1-4.

FIG. 6 is a top, left, rear perspective view of the snow stop of FIGS. 1-5, attached to a roof by a suitable adhesive.

FIG. 7 is a detail of slots in the base of the snow stop of FIGS. 1-6. Note also, FIGS. 11-18.

FIG. 8 is a bottom view of another embodiment of a snow stop of the invention, which is made of a light-transmissive material, for example, of a polycarbonate plastic monolithically molded to form the device, its base having holes but otherwise with a generally smooth bottom, and its shape otherwise akin to the snow stop of FIGS. 1-7.

FIG. 9 is a perspective view of another embodiment of a snow stop of the invention, which is made of a light-transmissive material, for example, of a polycarbonate plastic monolithically molded to form the device, its base being without holes and with a generally smooth bottom, and its shapes otherwise akin to the snow stops of FIGS. 1-8.

FIG. 10 is a perspective view of another embodiment of a snow

stop of the invention, which is made of an opaque material, for example, a polyvinyl chloride plastic, opacified if necessary, monolithically molded to form the device, its base having holes, and its shapes otherwise akin to the snow stops of FIGS. 1-9.

FIG. 11 is an embodiment of a snow stop of the invention more akin to the snow stop of FIGS. 1-7, showing preferred dimensions given in inches. Compare, FIG. 1.

FIG. 12 is a rear view of the snow stop of FIG. 11. Compare, FIG. 5.

FIG. 13 is a left side view of the snow stop of FIGS. 11 & 12, its right side being in essence a mirror image thereof. Compare, FIG. 4.

FIG. 14 is a detailed view of slots in the base of the snow stop of FIGS. 11-13. Note, FIG. 15, circle B. Compare, FIG. 7.

FIG. 15 is a cross-sectional view of bottom slots in the base of the snow stop of FIGS. 11-14, taken along A-A (FIG. 16).

FIG. 16 is a bottom view of the snow stop of FIGS. 11-15. Compare, FIG. 2.

FIG. 17 is a top, left, rear perspective view of the snow stop of FIGS. 11-16. Compare, FIG. 6.

FIG. 18 is a bottom, right, front perspective view of the snow stop of FIGS. 11-17.

FIG. 19 is a top view of another embodiment of the invention, having two support members for its snow restraining member, but otherwise generally akin to the snow stop depicted in detail in

FIGS. 11-18, with dimensions given in inches. Compare, FIG. 11.

FIG. 20 is a rear view of the snow stop of FIG. 19. Compare, FIG. 12.

FIG. 21 is a left side view of the snow stop of FIGS. 19 & 20, its right side being in essence a mirror image thereof. Compare, FIG. 13.

FIG. 22 is a detailed view of slots in the base of the snow stop of FIGS. 19-21. Note, FIG. 23, circle B. Compare, FIG. 14.

FIG. 23 is a cross-sectional view of bottom slots in the base of the snow stop of FIGS. 19-22 taken along A-A (FIG. 24). Compare, FIG. 15.

FIG. 24 is a bottom view of the snow stop of FIGS. 19-23. Compare, FIG. 16.

FIG. 25 is a top, left, rear perspective view of the snow stop of FIGS. 19-24. Compare, FIG. 17.

FIG. 26 is a bottom, right, front perspective view of the snow stop of FIGS. 19-25. Compare, FIG. 18.

FIG. 27 is a top view of another embodiment of the present invention, having a round base and ventilation holes therein.

FIG. 28 is a side, cross-sectional view of an upstanding member of the snow stop of FIG. 27 taken along A-A (FIG. 27).

FIG. 29 is a side view of the snow stop of FIGS. 27 & 28, shown at a 45-degree angle in relation to its upstanding members.

FIG. 30 is a side, cross-sectional view of part of the base with slots of the snow stop of FIGS. 27-29, circle B in FIG. 28.

FIG. 31 is a top, perspective view of the snow stop of FIGS. 27-30.

FIG. 32 is a bottom view of the snow stop of FIGS. 27-31.

FIG. 33 is a bottom, perspective view of the snow stop of FIGS. 27-32.

Any suitable material may be employed to make the snow stop of the invention; it may be made opaque or light-transmissive, in whole or in part: opaque: suitable metal, wood, ceramic, glass or plastic, for example, polyvinyl chloride (PVC), appropriately opacified if necessary; light-transmissive: suitable glass or plastic, for example, polycarbonate. The light-transmissive devices of the invention may be translucent or transparent, for example, substantially if not wholly transparent. The snow stop device of the present invention may be white, black, colorless (if light-transmissive) or of various color. The device may be made in component parts or monolithically, and it may be wholly or partly opaque or light-transmissive. Desirably, the device is wholly of one property as regards light and color, for example, wholly opaque white or wholly transparent blue.

Shapes and dimensions of the snow stop of the invention may vary. Thus, in addition to shapes seen in the drawings and such dimensions as in FIGS. 11-33, any other suitable shape or size of the device and its components may be employed. Grooves and/or holes may be the same or differing size(s) and/or shape(s). For example, round holes may be present, all of 0.375-inch diameters.